

Appln No. 10/540,796
S. Guinehut
Office Action dated July 10, 2006

On page 10, line 6, please insert the wording, "What is claimed is:" after the last paragraph, so that it reads:

What is claimed is:

Appln No. 10/540,796
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On page 3, line 24, add the following text between the description of Figures 3-8, and the Detailed Description of the Invention, so it reads in between full paragraphs 5 and 6, as follows:

Figures 3 to 8 are curves depicting the variations in energy with respect to mass and energy with respect to intrusion as a function of the density of the foam for various values of case parameters.

Figure 9 depicts a perspective schematic view of circular cross section, with case (9) having length L and thickness e.

Figure 1 schematically depicts a bumper beam 2 consisting of a hollow piece section, for example of open section (C-section or U-section) or alternatively of closed section, in which an energy-absorbing case 4 is at least partially housed.

Appln No. 10/540,796
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OCT 10 2006

On page 7, line 21, *as final paragraph before the claims in the specification*, please add the following:

Figure 9 depicts a perspective schematic view of circular cross section, with case (9) having length L and thickness e.

Appln No. 10/540,796
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OCT 10 2006

This listing of claims will replace all prior versions and listing of claims in the application.

LISTING OF CLAIMS

1. (currently amended) An energy-absorbing case (4) for a motor vehicle bumper beam (2) comprising a casing consisting of a hollow section piece which has a first end ~~able to be~~ attached to the bumper beam (2) and a second end ~~able to be~~ fixed to the end of a longitudinal longeron (6) of the motor vehicle, ~~characterized in that~~ wherein the casing is filled with a metal foam with energy-absorption properties, ~~the~~ having a density of ~~which is~~ between 0.1 and 0.4 g/cm³.
2. (currently amended) The energy-absorbing case as claimed in claim 1, ~~characterized in that~~ wherein the hollow section piece has a rectangular, ~~particularly or~~ square, cross section.
3. (currently amended) The energy-absorbing case as claimed in claim 1, ~~characterized in that~~ wherein the hollow section piece has a circular cross section.
4. (currently amended) The energy-absorbing case as claimed in ~~one of~~ claims 1 to 3, ~~characterized in that~~ wherein the hollow section piece is made of aluminum.
5. (currently amended) The energy-absorbing case as claimed in ~~one of~~ claims 1 to 3, ~~characterized in that~~ wherein the hollow section piece is made of steel.
6. (currently amended) The energy-absorbing case as claimed in ~~one of~~ claims 1, 2, 4 and 5, ~~characterized in that~~ wherein the hollow section piece has a square cross section with a side length (a) of between 50 mm and 80 mm.
7. (currently amended) The energy-absorbing case as claimed in ~~any one of~~ claims 2, ~~wherein~~ wherein 1 to 6, ~~characterized in that~~ the length (L) of the hollow section piece is between 80 mm and 200 mm.

Appln No. 10/540,796
S. Guinehut
Office Action dated July 10, 2006

8. (currently amended) The energy-absorbing case as claimed in ~~one of~~ claims 2, wherein 1 to 7, characterized in that the thickness (e) of the hollow section piece is between 1.5 mm and 3 mm.
9. (new) The energy-absorbing case as claimed in claim 1, wherein the density of the foam is between 0.1 and 0.3 g/cm³.
10. (new) The energy-absorbing case as claimed in claim 9, wherein the thickness (e) of the hollow section piece is between 1.5 mm and 3 mm.
11. (new) The energy-absorbing case as claimed in claim 10, wherein the hollow section piece has a rectangular or square cross section.
12. (new) The energy-absorbing case as claimed in claim 11, wherein the hollow piece section has a square cross section, the thickness of the case is between 2.2 and 3mm, and the length (L) of the hollow piece section is less than or equal to 80mm.
13. (new) The energy-absorbing case as claimed in claim 11, wherein the length of the hollow piece section is between 80 and 140 mm, and the density of the foam is between 0.1 and 0.3 g/cm³.
14. (new) The energy-absorbing case as claimed in claim 11, wherein the length of the hollow piece section is between 140 and 200 mm, and wherein it has an energy absorption mass ratio between 10 and 20.
15. (new) The energy-absorbing case as claimed in claim 8, wherein the hollow piece section has a square cross section, the thickness of the case is between 2.2 and 3mm, and the length (L) of the hollow piece section is less than or equal to 80mm.
16. (new) The energy-absorbing case as claimed in claim 15, wherein the density of the foam is between 0.2 and 0.4 g/cm³.

Appln No. 10/540,796
S. Guinehut
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17. (new) The energy-absorbing case as claimed in claim 8, wherein the length of the hollow piece section is between 80 and 140 mm, and the density of the foam is between 0.1 and 0.3 g/cm³.
18. (new) The energy-absorbing case as claimed in claim 8, wherein the length of the hollow piece section is between 140 and 200 mm, and wherein it has an energy absorption mass ratio between 10 and 20.